

**Environmental Technology Verification  
Metal Finishing Pilot  
First Stakeholder Meeting, November 19, 1998  
O'Hare Hilton, Chicago, IL**

**MEETING SUMMARY**

*Preliminary Matters*

This first stakeholder meeting of the Environmental Technology Verification - Metal Finishing (ETV-MF) Pilot began at 8 A.M. with the approximately forty participants introducing themselves. A list of participants is included. John Lingelbach, of Decisions & Agreements, LLC, facilitated the meeting.

Jim Voytko, of Concurrent Technologies Corp. (CTC), the Program Manager for the Partner Organization on this ETV pilot, welcomed everyone and thanked them for participating. He then summarized the agenda for the day and went over the meeting materials and logistics. The facilitator then covered the objectives for the day. He explained that for the morning the objectives were (1) for EPA and the Pilot Team to provide information about the ETV Program and this pilot and (2) for participants to discuss in general terms the value, goals, and design of the Program. The objectives for the afternoon were to discuss and decide on focus areas (technology categories in which to conduct verifications) and specific next steps.

*Overview and Discussion of the ETV-MF Pilot*

Penny Hansen, EPA's Director of the ETV Program, presented an overview of the overall Program. She described in general terms how the Program works, the principles on which it is based, its immediate- and long-term goals, and the progress of the twelve existing pilots. She explained that the Program is intended to provide objective, credible performance data to potential buyers and permittees of commercially-ready innovative technologies, thereby both saving them the resources it would otherwise take to obtain such information and reducing the risk associated with purchasing new technology. She also stressed that the Program is voluntary for the companies that submit their technologies for verification.

The most obvious goal of the Program is to provide performance data on innovative technologies. A second goal during this pilot phase is to evaluate how best to design and undertake a verification program. Ms. Hansen was candid about this being a new activity for all involved and emphasized the need to constantly evaluate the impacts, costs, and procedures of the Program.

Ms. Hansen went on to emphasize that the Program is not, and must not be construed as, an approval or certification process. The Program's purpose is informational - to assess

how well a technology performs. Its purpose is not to judge; it does not make a recommendation or claim that a technology meets any commercial or regulatory standard. Performance of one technology will not be compared to another; each verification is specific to the technology being tested.

Participants had a number of questions and comments following Ms. Hansen's remarks. Representatives of the vendor and supplier community expressed strong concerns about potential adverse impacts of a verification program. Participants stated that the Program is likely to create inappropriate and unintended competitive advantages and disadvantages in the marketplace due to a number of factors. First, participants suggested that potential buyers and permittees will presume that a technology that has been "verified" is better than one that has not been. Second, they pointed out that in many instances the reason a technology has not been verified will be that the supplier cannot afford the cost of the Program. The example was given of small companies, including many foreign companies, that may have outstanding technologies but be unable to get them verified because of the cost.

After a break, Alva Daniels, EPA Program Manager for the ETV-MF pilot, and Mr. Voytko described the stakeholder process and the work of EPA and the Partner Organization (the Team) since this pilot began six months ago. Ms. Daniels covered the stakeholder process, discussing the structure and role of the stakeholder group. She explained that stakeholder group members are selected jointly by EPA and the Partner Organization based on their expertise in metal finishing manufacturing, permitting, and pollution prevention processes and technologies. The group should be balanced in terms of representation of interests (e.g. metal finisher, suppliers, regulators, trade associations, consultants, POTWs, and other interested non-governmental organizations), though this need not mean equal numbers so long as all interests are effectively represented in stakeholder group discussions.

Ms. Daniels went on to describe the group's role of providing technical advice and direction to the Team. Initially this will involve prioritizing focus areas, developing technology selection criteria, and commenting on verification test protocols. Once the pilot is underway, it will involve reviewing draft verification reports and assisting with information dissemination. The group will meet about twice a year; when and where will be decided by the group.

Mr. Voytko introduced the consultants on the Team. Along with Alva Daniels of EPA and Jim Voytko of CTC, Team members include Donn Brown of CTC; Chris Start of the Michigan Manufacturing Technology Center; Gus Eskamani of Camp, Inc.; George Cushnie of CAI Resources, Inc.; and Peter Gallerani of Integrated Technologies, Inc.. Mr. Voytko went on to describe activities undertaken by the Team over the six months since EPA awarded the contract for this pilot on June 5, 1998. These have included extensive planning, reviewing various industry studies, preparing preliminary materials, identifying stakeholders, and conducting outreach at trade association meetings and other venues.

Other Team members briefly presented information about various aspects of the Program. Donn Brown described how the Program will be organized and managed. George Cushnie described current and anticipated outreach activities, and then later presented a review of previous MF P2 studies. Gus Eskamani covered definitions of terms used in the Program. Chris Start covered the preliminary plans for soliciting technologies. Peter Gallerani described the work-to-date on a generic verification protocol.

#### Further Discussion of the ETV-MF Pilot

Following the presentations, the discussion returned to issues regarding the purpose, implementation, and potential consequences of a verification program. Participants raised a question about whether the stakeholder group is sufficiently balanced in its representation of the relevant interests. This question was related to concerns about whether the stakeholder group would utilize voting to make decisions and the extent to which non-stakeholder participants in meetings can have input.

Ms. Hansen explained that the stakeholder groups working on other pilots were not employing voting other than as a means of getting a preliminary sense of the thinking of group members. She, Mr. Voytko, and group members agreed that this group would not utilize voting and that, if at some future point it decided to use voting, it would first address any issues concerning balance of interests. Furthermore, they agreed that non-stakeholder participants in meetings will have an opportunity to express their interests during the course of meetings, particularly when key decisions are made.

After lunch, the facilitator asked participants representing metal finishers to comment on whether the Program could be worthwhile from their perspective. A number of metal finishers stated that the information the Program is intended to provide would be useful, saving them time and money, and reducing their risk of expending resources on sub-optimal technologies. They indicated that this would increase their willingness to purchase and use new technologies.

They also emphasized, however, that the generic verification protocol, and technology specific test plans must be designed so as to provide comprehensive information about how well a technology will work over its full life under actual manufacturing conditions. All agreed that this is essential and that the stakeholder group will need to play an integral role in designing protocols and test plans that can produce the type of information that will be most helpful.

Participants agreed, with some expressing encouragement that the group could develop strategies for addressing any unintended, undesirable effects on the market place. One suggestion was that the Team and stakeholder group develop a cost-sharing system that includes all stakeholders, thereby enabling suppliers with less resources to verify their technologies.

Other participants remained unconvinced, asking whether the Program would provide enough otherwise unavailable information to justify its cost. They suggested that the

market place is working well enough on its own; that suppliers have sufficient incentives to provide accurate performance information about their products.

### Potential Focus Areas/Technology Categories

Participants spent some of the afternoon discussing potential focus areas. This was done primarily within the context of attempting to identify more fully how the pilot will work; the group was not attempting to prioritize focus areas for purposes of moving ahead with the solicitation of technologies. Nonetheless, the group considered various criteria for deciding on focus areas, discussed how broad focus areas should be, and identified and evaluated some alternatives.

Earlier in the day, Ms. Hansen had identified three criteria that have been employed by the other pilots: (1) focus areas need to be environmentally significant, with the potential to result in significant environmental improvements; (2) technologies in the focus area need to be innovative and relatively untested (though commercially ready); and (3) verification of technologies in the focus area needs to be practical (not too expensive or time consuming). Participants considered these and other criteria as they discussed various focus areas. They identified a few broad focus areas including: bath maintenance, in-process recycling, process substitution, material substitution, centralized wastewater recycling, and nickel processes. More narrow focus areas included ultrafiltration and acid stripping solutions. After some discussion, for present purposes the group agreed on the relatively narrow focus area of acid bath maintenance. Participants agreed that this would be a valuable area in which to verify technologies and provide performance data. They recommended that the Team use acid bath maintenance as an example of a focus area to develop more detailed materials about how the pilot will proceed.

### How to Proceed with the Organizational Phase of the ETV-MF Pilot

Notwithstanding the questions and concerns expressed by a number of participants, all participants appeared willing to proceed further with the organizational phase of this pilot. Many agreed that, at a minimum, the development of generally-accepted verification protocols would be a valuable activity. Such protocols could then be used by a variety of entities - including third parties, trade associations, and individual companies - in ways that could provide benefits similar to those envisioned for the ETV-MF Program.

Furthermore, all participants appeared to agree that they need a better understanding of how the Program will work before they can fully assess it or contribute to refining its direction. The stakeholder group requested that the Team consider acid bath maintenance as a focus area and develop straw technology solicitation, selection and testing protocols, as well as a straw proposal for cost allocation. Participants felt that with this information, they could provide far more helpful, focused, and definitive input at the next meeting

The Team agreed to develop and provide these materials. Participants agreed to discuss them at the second meeting.

### Meeting Evaluation and Future Meeting Dates

At the end of the meeting, participants took a moment to discuss what aspects of the meeting went well and what could be improved for future meetings. Some pointed out that the meeting materials were very well done and helpful. On the other hand, it was suggested that for future meetings, it would be helpful to get materials a few days in advance so that people can read them and come more prepared. The meeting location was very convenient for most participants, though starting later in the morning would allow more people to fly in that day.

Participants agreed to hold two dates as possibilities for the next meeting; February 9th and March 24th. Mr. Voytko agreed that the Team would assess its progress during early December, make a decision on which date would make more sense, and let people know by mid-December. He agreed to try and hold the next meeting in Chicago near the O'Hare Airport.

### **LIST OF ATTENDEES**

<b><u>Name</u></b>	<b><u>Affiliation</u></b>
Uylaine Barringer	US EPA-Region 5
Malcolm Boyle	Waste Management and Research Center (WMRC)
Anton Brinker	PolyIonix, Inc
Donn Brown	Concurrent Technologies Corporation
Rich Burton	ACME Industrial Group
George Cushnie	CAI Resources, Inc.
Alva Daniels	US EPA National Risk Management Research Laboratory
Linda Karveau	US EPA Region 1
Larry Emch McGean	ROHCO
Gus Eskamani	CAMP, Inc
Dennis Foster	Delta Faucet Company
Peter Gallerani	Integrated Technologies, Inc
Jewell Grubbs	US EPA - Region 4
Ken Hankinson	KCH Services
Penny Hansen	US EPA National Risk Management Research Laboratory

Chris Hayes	WMRC
Terry Hutchins	NAPCO, Inc.
Jim Jacobs	Northwestern Plating Works, Inc.
Doug Kaempf	US Department of Energy
Tim Lindsey	WMRC
John Lingelbach	Decisions & Agreements, Inc
Gary Lomasney	Pratt & Whitney
Fred Mueller	Multi-Flex Plating Co.
Jeff Nettesheim	Snap-on Tools Co
Kishore Rajagopala	WMRC
Terry Revier	Uyemura, International
Bill Saas	Taskem, Inc
Howard Saunders	Nashville Wire Products
Steven Schachameyer	Eaton Corporation
Paul Shapiro	US EPA - Office of Research and Development
Chris Start	Michigan Manufacturing Technology Center
Milton Stevenson	Anoplate Corporation
Rich Sustich	Metro Water District of Greater Chicago
Diana Tringali	Metal Finishing Supplier's Associations
Blair Vandivier	Benchmark Products, Inc
Jim Voytko	Concurrent Technologies Corporation
Ernest Walen	Heatbath Corp.
Tom Wallin	Illinois Environmental Protection Agency
Steve Williams	ICF Kaiser
Douglas Wyatt	United Airlines